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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,488	02/04/2004	Declan Reilly	4481-081	1940
7590	08/09/2006		EXAMINER	
Allan M. Lowe c/o Lowe, Hauptman, Gilman & Berner Suite 310 1700 Diagonal Road Alexandria, VA 22314			THOMAS, BRANDI N	
			ART UNIT	PAPER NUMBER
			2873	
DATE MAILED: 08/09/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/770,488	REILLY ET AL.	
	Examiner Brandi N. Thomas	Art Unit 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 30 May 2006.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-21 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 04 February 2004 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)               |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/4/04</u> . | 6) <input checked="" type="checkbox"/> Other: <u>Detailed Action</u> .                    |

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's request for reconsideration of the restriction requirement of the last Office action is persuasive and, therefore, the restriction requirement of that action is withdrawn.

***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Information Disclosure Statement***

3. Acknowledgement is made of receipt of Information Disclosure Statement(s) (PTO-1449) filed 2/4/04. An initialed copy is attached to this Office Action.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4, 7-10, 13-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagata et al. (2003/0076766 A1).

Regarding claims 1 and 15, Nagata et al. discloses, in figures 6A-6E, a beam splitter apparatus comprising: a first beam splitter mount (21) and a second beam splitter mount (22), the first beam splitter mount (21) being coupled to the second beam splitter mount (22) by a

deformable connection (figures 6C and 6D) the beam splitter apparatus being arranged so that, in use, a force applied to the second beam splitter mount (22) causes the second beam splitter mount (22) to turn relative to the first beam splitter mount (21) (section 0128).

Regarding claim 2, Nagata et al. discloses, in figures 6A-6E, a beam splitter apparatus, wherein the second beam splitter mount (22) is arranged to turn relative to the first beam splitter mount (21) in response to flexing of the deformable connection (section 0128).

Regarding claims 3, 4, 9, 10, 16, and 17, Nagata et al. discloses, in figures 6A-6E, a beam splitter apparatus, wherein the second beam splitter mount (22) is arranged to turn relative to the first beam splitter mount (21) through an angle of ten degrees or less (section 0128).

Regarding claims 7, 8, 13, and 14, Nagata et al. discloses, in figures 6A-6E, a beam splitter apparatus, wherein the beam splitter apparatus further comprises a first beam splitter mounted in the first beam splitter mount (21) and a second beam splitter mounted in the second beam splitter mount (22) (section 0128), the beam splitter apparatus, in use, being arranged such that the first beam splitter (beam splitter mounted on mount 21) and the second beam splitter (beam splitter mounted on mount 22) receive optical energy emitted by an optical source (sections 0128-0130).

Regarding claims 18-20, Nagata et al. discloses, in figures 6A-6E, a beam splitter apparatus, wherein the beam splitter deflects another portion of the beam incident on it and is not incident on the beam deflector, further comprising indicating powering the beam incident on the splitter by measuring power in the beam deflected by the splitter (sections 0128-0130 and 0239).

Regarding claim 21, Nagata et al. discloses, in figures 6A-6E, a beam splitter apparatus, wherein the deflector is a second beam splitter (mounted on beam splitter mount (22) (section 0128).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5, 6, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagata et al. (2003/0076766 A1).

Regarding claims 5 and 11, Nagata et al. discloses, in figures 6A-6E, a beam splitter apparatus, but does not specifically disclose wherein the beam splitter apparatus comprises a material having a coefficient of thermal expansion of 8ppm/K or less. It would have been obvious to modify the invention to include wherein the beam splitter apparatus comprises a material having a coefficient of thermal expansion of 8ppm/K or less, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use (In re Leshin, 125 USPQ 416). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention to include wherein the beam splitter apparatus comprises a material having a coefficient of thermal expansion of 8ppm/K or less for the purpose of maintaining the length of the beam splitter apparatus with regard to temperature.

Regarding claims 6 and 12, Nagata et al. discloses, in figures 6A-6E, a beam splitter apparatus, but does not specifically disclose wherein the beam splitter apparatus comprises Kovar. It would have been obvious to modify the invention to include wherein the beam splitter apparatus comprises Kovar, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use (In re Leshin, 125 USPQ 416). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention to include wherein the beam splitter apparatus comprises Kovar for the purpose of its ability to be compatible with thermal expansion of a structure.

*Conclusion*

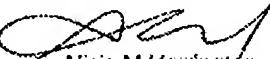
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandi N. Thomas whose telephone number is 571-272-2341. The examiner can normally be reached on 7- 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Alicia M Harrington  
Primary Examiner  
Art Unit 2873